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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/769,567	01/30/2004	Noriaki Fujii	275412002000	8530

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MORRISON & FOERSTER LLP
755 PAGE MILL RD
PALO ALTO, CA 94304-1018

EXAMINER

COLEMAN, VANESSA V

ART UNIT	PAPER NUMBER
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2609

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

2/1

Office Action Summary	Application No. 10/769,567	Applicant(s) FUJII, NORIAKI	
	Examiner Vanessa (Brandi) Coleman	Art Unit 2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/28/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>04/26/04, 06/15/04, 09/07/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Ogata et al., US Patent 6,614,720 (hereinafter "Ogata").

For Claim 1, Ogata discloses:

An optical pick-up apparatus (optical pickup device; see Figs. 1 and 9) that records information in an optical recording medium (optical disk 7; see Figs. 1 and 9) and/or reproduces information from the optical recording medium by means of light, comprising: a light source for emitting light (semiconductor laser 1; see Figs. 1 and 9); a diffraction grating (diffraction element 2, specifically diffraction grating 20; see Figs. 1, 2B, 9 and 10B) for diffracting light emitted from the light source, the diffraction grating being formed line-symmetrically with respect to a virtual line perpendicular to a radius direction of the optical recording medium in an attached state, and divided into a plurality of diffraction regions formed in such a manner that each has an inclination angle with respect to the

virtual line and grating cycles of adjacent diffraction regions have a phase difference of 180 degrees with each other (referencing Figs. 2B and 10B, the diffraction grating 20 features linear grating patterns extending horizontally in the y-direction, such that any virtual line formed vertically through the grating extending in the x-direction has an inclination angle with each individual grating pattern, while each grating pattern is parallel to each other, thus having a phase difference of 180 degrees with each other); light collecting means (objective lens 6; see Figs 1 and 9) for collecting light emitted from the light source onto the optical recording medium; a light diverging element (diffraction element 2, specifically diffraction grating 21, see Figs 1, 2A, 9 and 10A) for diverging reflection light reflected on the optical recording medium; and a light receiving element (photodetector 8; see Figs. 1, 2C, 9 and 10C) for receiving the reflection light diverged by the light diverging element, wherein the diffraction grating is formed on a rectangular substrate made of a light-transmitting material (see Figs. 1, 2B, 9 and 10B).

For Claim 2, Ogata discloses:

The optical pick-up apparatus, wherein the diffraction grating (diffraction grating 20) is disposed between the light source and the light diverging element (see Figs 1 and 9).

For Claim 3, Ogata discloses:

The optical pick-up apparatus, wherein the diffraction grating (diffraction grating 20) is formed on the substrate on a surface facing the light source (surface 2a; see Figs. 1 and 9), and the light diverging element (diffraction grating 21) is formed on the substrate on a surface facing the light collecting means (surface 2b; see Figs. 1 and 9).

For Claim 4, Ogata discloses:

The optical pick-up apparatus, wherein the light source (semiconductor laser 1) is formed integrally with the substrate on which the diffraction grating and the light diverging element are formed (see Figs. 1 and 9).

For Claim 5, Ogata discloses:

The optical pick-up apparatus, wherein the light source (semiconductor laser 1) is formed in such a manner that an outer shape thereof is shaped like a rectangular parallelepiped, and that a width w , which is a dimension in a direction parallel to a surface of the optical recording medium, is larger than a thickness t , which is a dimension in a direction perpendicular to the surface of the optical recording medium ($w > t$) (referencing Figs. 1 and 9, and particularly Fig. 14, the semiconductor laser has the shape of a rectangular parallelepiped, whose width in the y direction parallel to the surface of optical disk 7 is larger than a thickness in the x -direction perpendicular to the surface of optical disk 7).

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 6 is rejected under 35 U.S.C. 102(b) as being anticipated by Nomura et al., US Patent 6,342,976.

Claim 6, Nomura discloses:

An optical pick-up apparatus (optical pickup apparatus; see Col. 3 lines 46-67, Col. 4 lines 1-18) that records information in an optical recording medium and/or reproduces information from the optical recording medium by means of light, comprising: a light source for emitting light (semiconductor lasers 1B or 1C; see Fig. 1); a diffraction grating (diffraction grating region 12; see Fig. 2) for diffracting light emitted from the light source, the diffraction grating being formed line-symmetrically with respect to a virtual line perpendicular to a radius direction of the optical recording medium in an attached state, and divided into a plurality of diffraction regions formed in such a manner that each has an inclination angle with respect to the virtual line and grating cycles of adjacent diffraction regions have a phase difference of 180 degrees with each other (referencing Fig.2, it is

noted that the diffraction grating of region 12 has line-symmetric grating patterns, such that any virtual line formed vertically through the in either a vertical or horizontal direction with respect to the surface of the region has an inclination angle with each individual grating pattern, while each grating pattern is parallel to each other, thus having a phase difference of 180 degrees with each other); light collecting means (luminous flux diameter variable type objective lens 5; see Fig. 1) for collecting light emitted from the light source onto the optical recording medium; a light diverging element (half mirror 3; see Fig. 1) for diverging reflection light reflected on the optical recording medium; and a light receiving element (four-part photodiode 7; see Fig. 1) for receiving the reflection light diverged by the light diverging element, wherein the diffraction grating is formed integrally with the light collecting means.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Maruyama, Koichi	US Patent No. 6,191,889 B1
Yoo et al.	US Patent No. 6,765,857 B1
Muruyama, Koichi	US Patent No. 6,775,064 B2
Yamada et al.	US PreGrant Pub. No 20040174801
Muruyama, Koichi	US Patent No. 6,791,932 B1
Hayashi et al.	US Patent No. 6,995,909 B1

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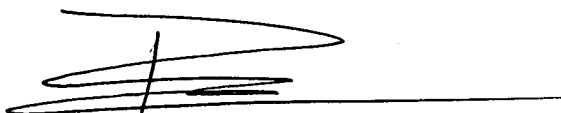
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vanessa (Brandi) Coleman whose telephone number is (571) 272-9081. The examiner can normally be reached on Monday thru Friday 7:30-5 EST, First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jayprakash Ghandi can be reached on (571) 272-9820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Vanessa (Brandi) Coleman
Art Unit 2609

VC

A handwritten signature in black ink, consisting of a stylized 'T' and 'L' with a horizontal line extending to the right.

THAO X. LE
PRIMARY PATENT EXAMINER